

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed November 11, 2003. Upon entry of the amendments in this response, claims 3 – 9 and 21 - 23 remain pending. In particular, Applicants have added claims 21 - 23, have amended claims 3 - 9 and have canceled claims 1 and 2 without prejudice, waiver, or disclaimer. Applicants have canceled claims 1 and 2 merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicants reserve the right to pursue the subject matter of these canceled claims in a continuing application, if Applicants so choose, and do not intend to dedicate the canceled subject matter to the public. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

Rejections Under 35 U.S.C. §102

The Office Action indicates that claims 1 - 9 stand rejected under 35 U.S.C. §102(3) as being anticipated by *Kneezel*. As set forth before in detail below, Applicants respectfully traverse the rejection.

With respect to *Kneezel*, *Kneezel* involves a method of forming a semiconductor structure from a first wafer and a second wafer. A groove is formed on an upper surface of the first wafer such that an opening is formed in the first wafer that exposes at least one alignment reference target on the upper surface of the second wafer. The bonded first wafer and second wafer are then diced using the exposed alignment reference target.

Upon review of *Kneezel*, there is no teaching or suggestion in *Kneezel* that involves dicing of a wafer with respect to particular components supported by the wafers. Therefore, Applicants respectfully assert that *Kneezel* is legally deficient for anticipating the pending claims for at least the reasons indicated below.

Referring now to the claims, newly added claim 21 recites:

21. A method for producing a die assembly comprising:

providing a wafer stack having a first wafer and a second wafer arranged in an overlying relationship with each other, *a first portion of the first wafer supporting a first component, a second portion of the first wafer supporting a second component*, the first component and the second component being located between the first wafer and the second wafer;

exposing the first portion and the second portion of the first wafer by removing a portion of the second wafer; and

dicing the first wafer between the first component and the second component to form a first die assembly and a second die assembly, *the first die assembly including the first portion of the first wafer that extends outwardly beyond the periphery of the first portion of the second wafer, and the second die assembly including the second portion of the first wafer that extends outwardly beyond the periphery of the second portion of the second wafer such that neither the first component nor the second component is located between the first wafer and the second wafer.*

(Emphasis Added).

Applicants respectfully assert that *Kneezel* is legally deficient for the purpose of anticipating claim 21, because at least the features/limitations emphasized above are not taught or otherwise disclosed by *Kneezel*. Specifically, Applicants respectfully assert that *Kneezel* does not teach “a first portion of the first wafer supporting a first component, as second portion of the first wafer supporting a second component,” and “dicing the first wafer between the first component and the second component . . . , the first dye assembly including the first portion of the first wafer that extends outwardly beyond the periphery of the first portion of the second wafer, and the second dye assembly including the second portion of the first wafer that extends outwardly beyond the periphery of the second portion of the second wafer.” Additionally, Applicants respectfully assert that *Kneezel* does not teach or otherwise disclose that “neither the first component nor the second component is located between the first wafer and the second wafer,” after performing the dicing. Therefore, Applicants respectfully assert that claim 21 is in condition for allowance. Since the remaining claims are dependent claims incorporating all the

features/limitations of claim 21, Applicants respectfully assert that these claims also are in condition for allowance.

Prior Art Made of Record

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.



CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 3 – 9 and 21 - 23 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,



M. Paul Qualey, Jr. Reg. No. 43, 024

**THOMAS, KAYDEN,
HORSTEMEYER & RISLEY, L.L.P.**
100 Galleria Parkway N.W., Suite 1750
Atlanta, Georgia 30339
(770) 933-9500

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on 1/29/04.

Stephanie Riley
Signature